

BARTA, Rudolf

Chemical Abst.  
Vol. 48  
Apr. 10, 1954  
Analytical Chemistry

*/ Differential thermal analysis as a rapid control method for chemical industries. Rudolf Barta and Vladimir Satava. Chem. Průmysl 3, 113-17(1953).—A review with 28 references and an app. registering endo- and exothermic reactions up to 1100° is described. Photographic paper records deviations of galvanometer connected to a thermocouple in the furnace. The analysis lasts approx. 1 1/2 hrs.*  
F. J. Hendel

4/

- Spark plugs for internal combustion engines. Rudolf  
Bárta and Milošlav Bartuška (Chem.-Technol. Fac.,  
Prague). *Pokroky průzkum. met., Sborník, Brno 1953*, 647-62  
(Pub. 1954).—The ceramic mass of the spark plugs should  
preferably be a synthetic corundum which by the right  
method of manuf. and machining can have elec. and mech.  
qualities which make it superior to porcelain and steatite  
for this purpose. 12 references. Werner Jacobson

400  
1/1

9/2

BARTA, R.

"New Methods o Dressing Raw Materials in the Silicate Industry." (To be contd.) p. 18  
(RUDY, Vol. 2, No. 1, Jan. 1954) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4,  
April 1954. Unclassified.

BARTA, R.

"New Methods for Dressing Raw Materials in the Silicate Industry." p. 51, Praha, Vol. 2, no. 2, Feb. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

BARTA, R.

Improving methods of porcelain burning, p. 122, SKLAR A KERAMIK  
(Ministerstvo lehkeho prumyslu) Praha, Vol. 4, No. 5, May 1954

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1955

BARTA, R.

New raw materials for porcelain and ceramic products of general use,  
p. 269, SKLAR A KERAMIK (Ministerstvo lehkého průmyslu) Praha, Vol.  
4, No. 10, Oct. 1954

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1954

BARTA, R.

179. Dinas bricks from siliceous schist.—R. BARTA, J. VAŠČEK, and O. VOPÁLEK (*Ilav. Záv.*, 9, 11, 1954; abstracted in *J. Appl. Chem., Lond. (Kosur)*, 4, 650, 1954).—Results of examination of physical and technological properties of indigenous siliceous schist are discussed. Schist from certain locations is suitable for production of high-quality  $\text{SiO}_2$  bricks, which maintain their refractoriness up to 1,680–1,700°C.

BARTA, RUDOLF

8271\* Microscopy of Metallurgical Fire Clay. Mikroskopie  
hutnického železa. (Czech.) Rudolf Barta and Miloslav  
Bartůšek. Hutnické Listy, v. 9, no. 10, 1954, pp. 410-417.  
Structural changes during firing; microscopical evaluation of  
products. Graphs, micrographs, 19 ref.



BARTA, R.; SRBEK, F.

"Use of Waste Clays and Coal Waste From the North Bohemian Brown Coal Basin", P. 257, (STAVIVO, Vol. 32, No. 7, July 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

BARTA, R.; SRBEK, F.

"Utilization of waste rock and coal waste in the brown-coal basin of North Bohemia."  
(p. 160). STAVIVO (Ministerstvo stavebnich hmot) Praha, Vol 32, No 8, Mar.1954

SO: East European Accessions List, Vol 4, No 8, Aug 1954

1951, 1.

See trends in the construction of class tank services. 1. 11.  
JEL: A 111111, Praha, Vol. 1, no. 3, Mar. 1951.

1. Monthly list of East European Accusations, (1951), no. 11, Oct. 1951,  
Vol.

1955, 1.

Let printing in the place and certain literature. p. 101.

1. A. K. 111, Praha, Vol. 5, no. 5, June 1955.

1. List of List of List of European as evidence, (1.1), 11, 10. 1, no. 11, Oct. 1955,  
Encl.





*BARTA, RUDOLF*

Czechoslovakia /Chemical Technology. Chemical Products I-12  
and Their Application

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31596

Author : Barta, Rudolf

Title : Slavik's Tunnel Furnace for the Firing of  
Electric Porcelain

Orig Pub: Sklar a keramik, 1955, 6, No 11, 260-261

Abstract: Brief description of the first Czechoslovak tunnel  
furnace (TF) for firing electric porcelain, de-  
signed by the Engineer Slavik, which was put in  
operation in July 1955. The TF has a cross-sec-  
tion of 0.65x1.25 m, is 122 m long and holds 55  
trucks. In the TF are fired electric insulators  
weighing up to 250 kg each, at 1450°; by heating

Card 1/2

BARTA, R.

4

✓ Plastic ceramic raw materials from Czechoslovakia.  
R. Barta (Inst. Silicate Technol., Prague), *Silikattech.* 6,  
1960(1963).—The mineral compn. (controlled by micro-  
scopic inspection and differential-thermal analysis), grain-  
size distribution, base exchange, and rheological prop-  
erties (of 30% suspensions) were systematically studied.  
There is an important correlation between the base-exchange  
capacity (3.5–18.7 meq./100 g.) and the degree of order in  
the crystals of the clay minerals (indicated by changes in the  
intensity of interference lines, different from 001 and 0k0).  
The common properties (d., s, thermal decompn. temps.,  
ceramic-technological properties) are less influenced by  
structural factors. The nature and amts. of adsorbed  
cations and the stability of secondary particles in kaolinitic  
clays affect the ceramic quality distinctly. Particularly  
interesting is the occurrence of diatomaceous shells, spongi-  
lliae, and silica algae in Wildstein blue clay B, of 80% fire-  
clay mineral in the fraction between 1- and 3- $\mu$  grain size,  
and of illite in the finest fractions. W. Elitz

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BARTA R.

Tridymite Silica and its Production. R. Barta and K. Spáček. *Hutnická Listy*, 1955, 10, (12), 708-713. [in Czech].  
The method of production of brown-coloured high-quality silica made in a new plant from local resources is described. The properties of bricks for blast furnace linings made from this material were studied. The tridymite content is about 30%. — P. P.

Handwritten note: *Handwritten note*

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MI D., 1.

A conference on silicate research in Bohemia. p. 351.  
(NUVA TECHNICA, Vol. 1, No. 11, Nov 1956, Praha, Czechoslovakia)

22: Monthly List of East European Accessions (EAL) 10, Vol. 6, No. 11, Dec 1957. Uncl.

BASTA, R.

The nature of some plastic ceramic materials. p. 6.

SKLAR A KERAMIK

Vol. 6, no. 1, Jan. 1956

Czechoslovakia

Source: EAST EUROPEAN LISTS

Vol. 5, no. 7

July 1956

BARTIA, R.

Again a different opinion about tridymite. p. 60.  
SILAR A KOLA IK, Prague, Vol. 5, no. 3, Mar. 1956.

SO: Monthly List of East European Accessions, (BIBL), LC, Vol. 5, no. 6 June 1956, Uncl.

BARTA, R.: SATAVA, V.

Basic research in silicates. p. 123.

Vol 6, no. 5, May 1956. SKLAR A KERLIK. Praha, Czechoslovakia.

Source: Eastern European Accession, List, (EEAL), Library of Congress Vol 5, no 12, December 1956.

BARTA, R.

P. P. Budnikov and Ch. O. Gevorkjan's Farfor;  
a book review. p. 183. SKLAR A KERAMIK,  
(Ministervo lehkeho prumyslu) Praha. Vol. 6,  
no. 7, July 1956.

SOURCE: East European Accessions List, (EEAL),  
Library of Congress. Vol. 5, no. 12,  
December 1956.

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Davis's Manual Formae for firing porcelain for electrical equipment, p. 260

См. А. ДЖИЛ (инициатор во белото пружање), Vol. 6, №. 11, Nov. 1955

iran, czechoslovakia

SOURCE: East European List (EEL) Library of Congress, Vol. 6, No. 1, January 1957

CZECHOSLOVAKIA / Chemical Technology. Chemical Prod- H-13  
ucts and Their Application. Ceramics.  
Glass. Binding Materials. Concrete.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 2022.

Author : Barta, R., Spicak, K., Bartuska, M.

Inst : Not given.

Title : High Quality Dinas.

Orig Pub: Hutnicke listy, 1956, 11, Mo. 9, 553-556.

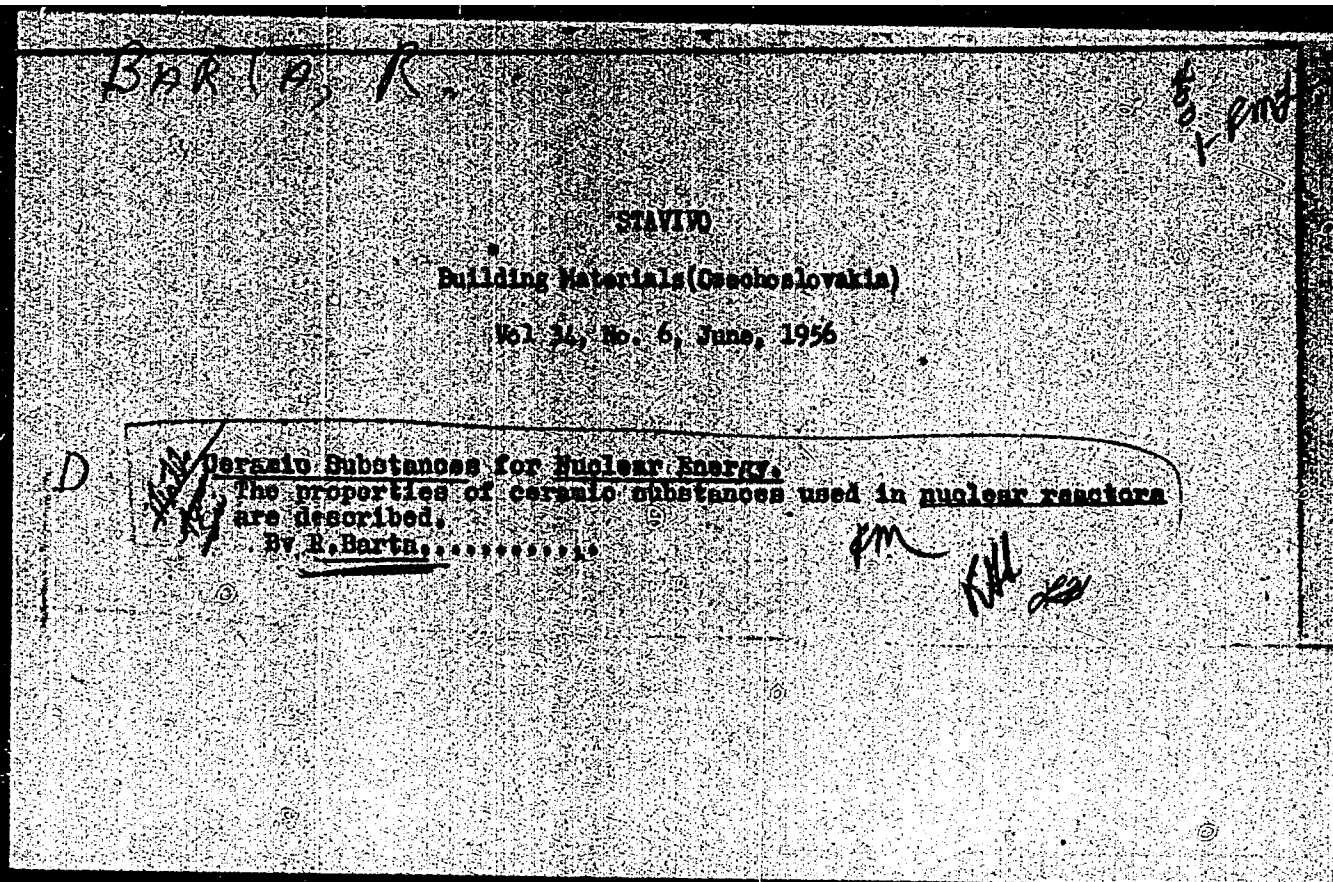
Abstract: See also R. Zh. Met., 1956, 990.

Card 1/1



BART, RUDOLF

1. The system aluminum oxide-silica gel. Rudolf Bart and Constantin Bart (Polish) in "Prace Chemiczne" Vol. 19, 21, 22 (1930) - State 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.



BARTA, R.

BARTA, R. O.Kallauner's Staviva I. (Building Materials I.); a book review. p. 351

Vol. 34, no. 9, Sept. 1956

STAVIVO

TECHNOLCGY

Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

BARTA, R.; SATAVA, V.

BARTA, R.; SATAVA, V. Some theoretical remarks on binding materials. p. 101

Vol. 49, no. 6, June 1956

EPITOANYAG

Budapest, Hungary

SO: East European Accession Vol. 6, no. 3, March 1957

BAJDA, EMIL

"Zakladni wyzkum silikatu. (Vyd. 1.) Praha, Statni nakl. technicke literatury, 1957. [Basic research in silicates. 1st ed. bibl., diagrs., graphs, tables]"  
p.103 (Praha, Czechoslovakia)

Monthly Index of East European Accessions (MEEA) LC, Vol. 7, No. 8, August 1958

15 4  
Microscopic evaluation of limestone for technological purposes. Miroslav Bařtůška and Rudolf Barta (Vysoká škola chem. technol., Prague). *Sborník výzk. školy chem. technol. v Praze* 1957, 49-61.—On the basis of macro- and microstructure, mineralogical compn., and the way of inclusion of impurities, various kinds of limestone were classified with respect to the technol. properties and purposes.  
M. Hudlíček



CONTRACT :  
CATEGORY :

Res. Comp. : N/A, No. 1 1960, No. 1000

Res. Comp. :

Res. Comp. :

Res. Comp. :

Res. Comp. :

A BIP CT : Glass-forming materials for boron in SS (up to 1100°), as well as for the remaining raw materials (up to 1150°) and for studying valence electronic structure in the field of silicon, and in the solution of boron, and in the field of boron, and without additions. The study of the reacting mixtures on the above SS shows the exothermic reactions of the reaction of  $2CaO \cdot SiO_2$  (1190°) and  $3CaO \cdot SiO_2$ .

Res. Comp. : 7/3



1. *[illegible]* : *[illegible]*, No. 1 1970, No. 1954

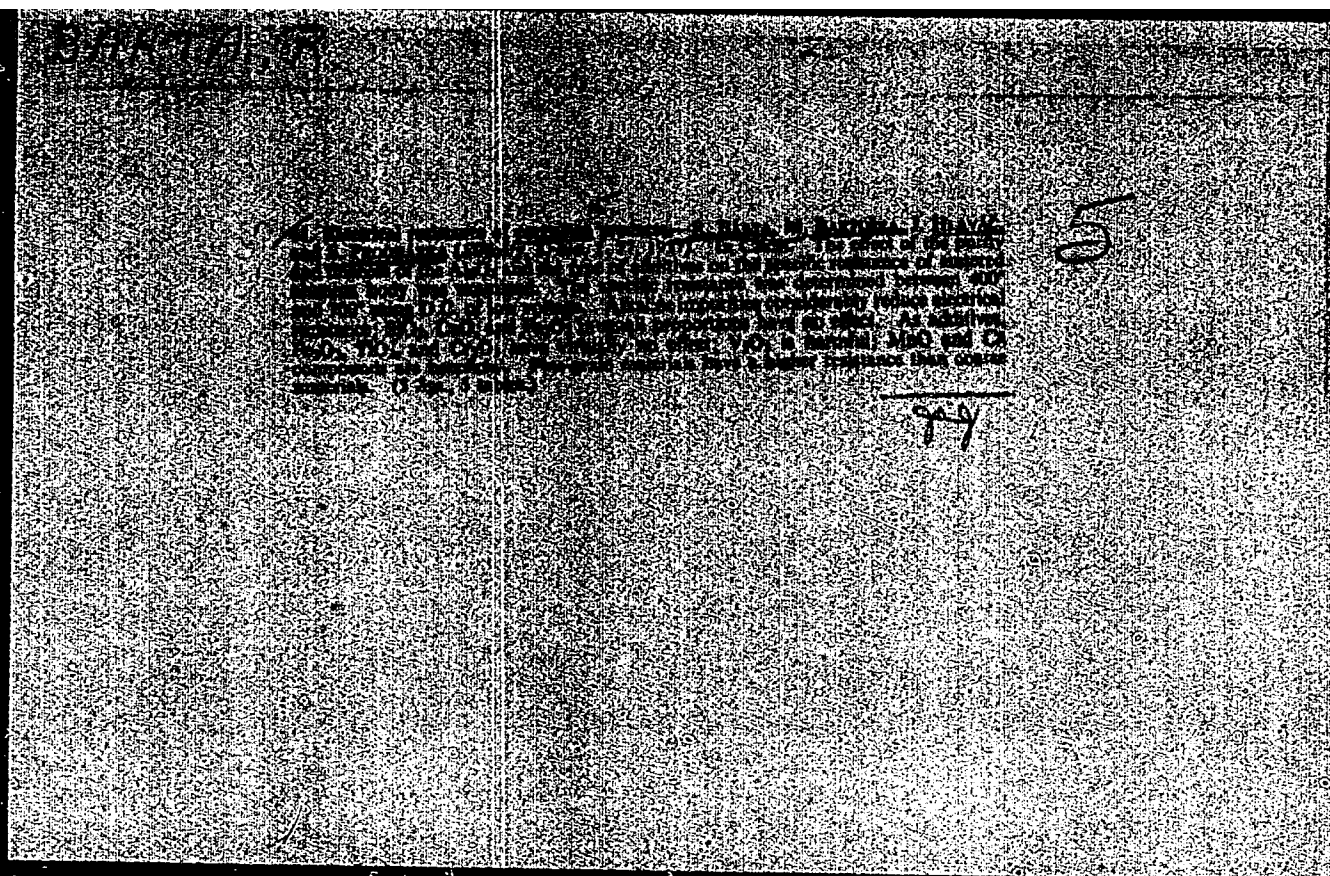
2. *[illegible]* :  
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6. *[illegible]* : *[illegible]*, and the end-of-the-line relations of the  
organization of *[illegible]* -- S. S. S. S. S.

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BARTA, K.

The significance and further development of the methods of thermal analysis.  
p. 113. (STUDIA, Vol. 1, No. 2, 1957, Praha, Czechoslovakia)

SO: Monthly List of East European accessions (JAL) 10, Vol. 4, No. 17, Dec 1957. Incl.

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Terminology and abbreviations in thermal analysis. p. 101.  
(SILIKATY, Vol. 1, No. 2, 1957, Praha, Czechoslovakia)

50: Monthly List of East European Accessions (EBAE) 10, Vol. 6, No. 11, Dec 1957, Cont.

HALA, A.; VIKAR, C.

A new method of Minis clc extraction from crystalline quartz materials.

p. 213 (Silikaty) Vol. 1, no. 3, 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EAL) LC, VOL. 7, NO. 1, JAN. 1958

PANTA, V.

The 250th anniversary of technical schools in Czechoslovakia. p.66. (Sklar A. Veranik.  
Praha. Vol. 7, no. 4, Apr 1957)

60: Monthly List of East European Accessions (SEAL) 10, Vol. 6, no. 7, July 1957. Incl.

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their  
Application. Ceramics. Glass. Binding Materials.  
Concrete.

H-13

Abstr Jour: Ref Zhur-Khin., No 2, 1959, 5463.

Author : Berta, Rudolf.

Inst :

Title : New Views on Crushing.

Orig Pub: Stlar a keramik, 1957, 7, No 7, 202-203.

Abstract: It is noted that in crushing, an alteration of the  
crystalline structure of the substance can take place  
and internal stresses depending on the method of  
crushing can appear in it. It is shown that the  
crystalline properties of the substance can disappear,  
if a high degree of pulverization is achieved. -  
V. Yelisek.

Card : 1/1

BARTA, R

BARTA, Rudol'f (Praga)

"Granulated blast-furnace slag and slag cements" by P.P. Budnikov  
and I.L. Znachko-Iavorskii. Reviewed by R. Barta. Zhur.prikl.khim.  
30 no.12:1880 D '57. (MIRA 11:1)

(Slag) (Slag cement)

(Budnikov, P.P.) (Znachko-Iavorskii, I.L.)



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Barta, R.; Srbek, F.

Barta, R.; Srbek, F. Production of large-sized bricks and brick blocks.

Vol. 35, no. 1, Jan. 1957

STAVIVO

TECHNOLOGY

Czechoslovakia

So. East European Accessions, Vol. 6, May 1957

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BARTA, R.

250th anniversary of the Institute of Technology in Prague (1707-1957). p. 133.

(Stavivo. Vol. 35, no. 4, Apr. 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their      H.  
Application - Silicates. Glass. Ceramics, Binders.

Als Jour : Ref Zhur - Khimiya, No 9, 1958, 29619

Author : Barta, R.

Inst :

Title : New Ways of Producing Lime.

Orig Pub : Stavivo, 35, No 10, 407-408 (1957) (in Czech with summaries in German, French, English, and Russian)

Abstract : A brief discussion of the requirements which must be met in lime production, of raw-material supply problems, concentration, and calcining.

Card 1/1

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BARTA, R.

TECHNOLOGY

Periodical: STAVIVO. Vol. 36, no. 12, Dec. 1958

BARTA, R. One hundredth anniversary of the Hoffman kiln. p. 481.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3  
March 1959 Unclass.

BARTA, Rudolf, prof., inz., doktor technických ved

Fifty years of the department of silicate technology. Sbor chem tech  
no.3, part 1:379-381 '59.

1, Prednosta, Katedra technologie silikatu, Vysoka skola chemicko-  
technologicka, Praha.

BARTA, Rudolf, prof., inz., doktor technických ved; BARTUSKA, Miloslav;  
HLAVAC, Jan; PROCHAZKA, Svante

High-corundum materials for electric insulation and electronics. Sbor  
chem tech no.3, part 1:425-431 '59.

1. Katedra technologie silikatu, Vysoka skola chemicko-technologicka,  
Praha.

BARTA, Rudolf, prof., inz., doktor technických ved; RUZEK, Josef;  
SPICAK, Karel, inz.

Highly mullitized chamotte. Sbor chem tech no.3, part 1:501-505  
'59.

1. Katedra technologie silikatu, Vysoka skola chemicko-technologicka,  
Praha.

BARTA, Rudolf, prof., inz., doktor technických ved; JEDLIČKA, Josef

Contribution to the study of lime activity. Sbor chem tech no.3,  
part 1:507-518 '59.

1. Katedra technologie silikatu, Vysoká škola chemicko-technologická,  
Praha.



BARTA, Rudolf, prof., inz., doktor technických ved; JEDLIČKA, Josef;  
ČECH, Jaroslav

New method of white cement production. Sbor chem tech no.3, part 1:  
519-524 1959.

1. Katedra technologie silikatu, Vysoká škola chemicko-technologická,  
Praha.



BARTA, R.

"Improving the education of chemistry engineers." P. 250.

NOVA TECHNICA. (Rada vedeckych technickych spolecnosti pri Ceskoslovenske akademii ved). Praha, Czechoslovakia, No. 6, 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,  
August 1959,  
Uncle.

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| COUNTRY     | : Czechoslovakia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | N-13  |
| PROPERTY    | :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |
| ABST. JOUR. | : RZKhim., No. 22 1959, No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 19248 |
| AUTHOR      | : Barta, R.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |
| INT.        | : Not given                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |
| TITLE       | : New Investigations on Porcelain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |
| ORIG. PUB.  | : Sklar a Keramik, 9, No. 2, 80-81 (1959)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |
| ABSTRACT    | : The author reviews research done on the properties of porcelain (P) at the Department of Silicates Technology of Prague University in 1957-1958. The research covers the preparation of synthetic Li-silicates (encriptite $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ , spodumene $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 4\text{SiO}_2$ , and petalite $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 8\text{SiO}_2$ ) by fusion at $1,250^\circ$ , the study of the comparative effect of aging and of vacuum treatment of kaolin-containing P on the workability of the latter, the study of the effect of the addition of surface- |       |

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|            |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |
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| ACC. NO.   | : | Czechoslovakia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | B-12  |
| CATEGORY   | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |
| ABS. JOUR. | : | REKhim., No. 22 1959, No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 79296 |
| AUTHOR     | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |
| EDITOR     | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |
| TITLE      | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |
| ORIG. PUB. | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       |
| ABSTRACT   | : | active agents on the properties of ceramic slips of low plasticity, the investigation of the rheology of porcelain slips, the study of the firing temperature of porcelain bodies made from Karlovovar kaolin, the study of the causes for the appearance of bubbles following the addition of quartz, the study of the effect of electrolytes on the viscosity of the slips, and the evaluation of the suitability of six refractory clays and of two kaolins for the production of saggers for the |       |
| CARD:      |   | 2/3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |

COUNTRY : Czechoslovakia  
CITY :

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AND. JOUR. : RAKous., No. 28 1959, No.

29246

AUTHOR :  
TITLE :  
SUBJ. :  
REF. :  
FILE :  
FILE :

DATE. REC. :

ABSTRACT : firing of porcelain ware.

S. Giebow

100: 5/5

125

BARTA, RUDOLF

PLATE I BOOK EXPOSITION 807/578

Book. Biologically polytechnically institute.

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# The Chemistry, Technology, and History (Cont.)

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CONTENTS: The articles contained in this collection deal with methods of studying the properties of various glasses and ceramics compositions and the technology of glass and ceramic manufacture. The last two articles treat the history of silicate chemistry. No personalities are mentioned. References follow the articles.

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# The Chemistry, Technology, and History (Cont.)

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## THE CHEMISTRY AND TECHNOLOGY OF GLASSES

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BARTA, Rudol'f, doktor-inzhener (Praga)

Dinas brick for metallurgical furnaces. Sbor. nauch. trud. Bel.  
politekh. inst. no.86:93-105 '60. (MIRA 13:10)  
(Czechoslovakia--Firebrick)



BARTA, R

PHASE I BOOK EXPLOITATION

CZECH/5253

Weigner, Jaromír, Docent, Engineer, Doctor, Rudolf Barta, Professor, Engineer, Doctor, Doctor of Technical Sciences, and Josef Koritta, Professor, Engineer, Doctor.

Průmysl anorganickochemický, silikátový a metalurgie (Industry of Inorganic Chemistry, Silicates, and Metallurgy) Prague, SNTL, 1960. 333 p. (Series: Obecná chemická technologie, 1) 3,200 copies printed.

Reviewers: Mikuláš Gregor, Professor, Engineer, Doctor, František Kanhauser, Professor, Engineer, Doctor, and Albert Regner, Professor, Engineer, Doctor. Tech. Ed.; Marie Králová. Chief Ed.: Adolf Balada, Doctor. Resp. Ed.: Jindřich Šob, Engineer.

PURPOSE: This book is intended for chemical engineers and technicians working in the chemical industry, and for students enrolled in higher schools of technology.

COVERAGE: The book surveys the principal processes used in the production of inorganic chemicals, in the technology of silicates, and in the chemical technology of metals. It has been approved by decree of the Ministerstvo

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Industry of Inorganic Chemistry, Silicates, and Metallurgy

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školský a kultury (Ministry of Education and Culture) as a textbook for higher schools of chemical engineering and chemical technology. This is the first of five volumes to be published under the general title Obecná Chemická Technologie (Modern Chemical Technology) and deals with those branches of the chemical industry whose base is inorganic chemistry, including, therefore, the silicate chemicals industry and metallurgy. The theoretical basis for each process discussed is explained, and descriptions of the raw material used and of the finished product provided. Subsequent volumes of the series will deal with the technologies of organic chemistry, fuels, water, the food and brewing industries. The following personalities are mentioned: Professor Doctor M. Gregor, Engineer; Professor Doctor F. Kanhäuser, Engineer; Professor Doctor Regner, Engineer; and Engineer S. Havel, and L. Koritta. References accompany each chapter.

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I. The Production of Inorganic Chemicals (Doctor Jaromír Weigner, Docent, Engineer)

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S/081/62/000/021/038/069  
B171/B101

15 3209

AUTHORS: Bárta, Rudolf, Procházka, Svante, Šebek, František

TITLE: A method of producing refractory concretes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 347, abstract  
21K367 (Czechosl. patent 99958, June 15, 1961)

TEXT: Refractory concretes, including also the light-weight concretes, obtained by addition of loosening or foaming agents, can be prepared from a mixture of crushed aggregate, such as corundum and mullite wastes, with a cementing agent. The crushed aggregate is mixed either with  $H_3PO_4$ , or with its solution or a solution of its salts. Alumina or  $Al(OH)_3$  is also added. The mass consolidates at 50-300°C. Example 1: composition of the mass: mullite (0.5-0.2 mm fraction) 40%; ditto (0.2-0.1 mm) 25%; ditto (0.1-0.06 mm) 8%; ground alumina 4%; 60%-solution of  $H_3PO_4$  14%.  $H_3PO_4$  is added to the dry mixture of aggregate and alumina and the product is vibrated. After several hours, the set mass is heated to 80-100°C in a form or after its removal therefrom. Example 2. Composition of the mass:  
Card 1/2

A method of producing refractory ...

S/081/62/000/021/038/069  
B171/B101

fused corundum (0.2-0.1 mm fraction) 43%; ditto (0.06 mm) 40%;  $H_3PO_4$  17%.  
The mixture is poured into a form and consolidated by drying at temperatures rising, from 50 to 120°C. After its removal from the form, the mass is fired at 1700°C. [Abstracter's note: Complete translation.]

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S/081/62/000/006/061/117

B149/B108

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AUTHORS: Bárta, R., Procházka, S.

TITLE: Highly refractory concrete with metaphosphoric acid as a binder

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1962, 435, abstract 6K414 (Stavivo, v. 39, no. 8, 1961, 282 - 283)

TEXT: Results are given of an investigation of highly refractory concretes (RC) with metaphosphoric acid as a binder. The composition of the mass for RC is given: filler 50 - 65%, aluminum oxide hydrate 5-15%, 45% metaphosphoric acid 5 - 15%, additives 35 - 5%. As additives, substances are given which have an effect on the strength, setting and other properties of RC, e. g. kaolin, highly dispersive fractions of the filler, alumina, etc. With a corundum filler mass, the temperature of the beginning of deformation is 1750°C, the cold compressive strength after drying is 60 kg/cm<sup>2</sup>, after baking at 400°C it is 160 kg/cm<sup>2</sup>, after firing at 1750°C 230 kg/cm<sup>2</sup>. The mass is resistant to thermal shocks of cooling from 2000°C X  
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Highly refractory ...

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to  $-30^{\circ}\text{C}$ . This property is related with the dispersivity of the filler. The properties of a mass in which mullite was used as filler are also given. [Abstracter's note: Complete translation.]

X

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BARTA, R.; BRUTHANS, Zs.

Use of differential thermal analysis in the research of activation  
due to the vibration grinding. Silikaty 6 no.1:9-15 '62.

BARTA, R., prof., inst., dr., DSc., (Praha 6, Michelská 5)

Development of thermography in the recent years. Silikaty 6 no.1:  
125-134 '62

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"Use of thermogravimetry in the chemistry of cements" by Paullenset.  
Reviewed by Barta. Silikaty 6 no.1:140 '62.



BARTA, R., prof., inz., dr., DSc. (Praha 6, Micurínova 5)

"Property measurements at high temperatures" by W.D.Kingery.  
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"Heat in fine ceramics" by F.Slavik. Reviewed by Rudolf Barta.  
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"Research on cement and bonding agents". Reviewed by  
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"Suspension walls" by Svetla Francu. Reviewed by Rudolf Barta. Zklar  
a keramik 12 no.8:260 Ag '62.

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"Architecture and the building glass in the past and today" by  
Oscar Knapp. Reviewed by R.Barta. Sklar a keramik 12 no.9:288  
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"Glass technology" by I.I. Kitajgorodskiy [Kitajgorodskiy, I.I.]  
and others. Reviewed by Rudolf Barta. Sklar a keramik 12 no.10:320  
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"A scientist who knows everything" by R.Bersadskij [Bershadskiy,  
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